

Application No. 09/683,659  
Amendment dated December 9, 2004  
Reply to Office Action of September 17, 2004

RD-26,623-1

### **REMARKS**

Applicants appreciate the consideration shown by the Office, as evidenced by the Final Office Action mailed on September 17, 2004. In that Office Action, the Examiner rejected Claims 1-7, 11-20, 24-27, 30-32, 34-41, 44-49, 53-62, 66-69, 72-74, and 76-80. The Examiner has also objected to Claims 8-10, 21-23, 28, 29, 33, 42, 43, 50-52, 63-65, 70, 71, and 72. Claims 5, 8, 18, 21-23, 25, 32, 42, 47, 50, 60, 63-65, 67, 74, and 81-94 have been canceled, without prejudice. New Claims 95-128 have been added. As such, Claims 1-4, 6, 7, 9-17, 19, 20, 24, 26-31, 33-41, 43-46, 48, 49, 51-59, 61, 62, 66, 68-73, 75-80, and 95-128 remain in the case with none of the claims being allowed.

The September 17 Final Office Action has been carefully considered. After such consideration, Claims 5, 8, 18, 21-23, 25, 32, 42, 47, 50, 60, 63-65, 67, 74, and 81-94 have been canceled, without prejudice, and Claims 1, 9, 10, 19, 20, 26-28, 33, 34, 40, 45, 48, 49, 51, 52, 61, 62, 68-71, 75, and 76 have been amended. In addition, new Claims 95-128 have been added. Applicants respectfully request reconsideration of the application by the Examiner in light of the above amendments and the following remarks offered in response to the April 6 Final Office Action.

### **Objections to the Claims**

The Examiner has objected to Claims 8-10, 21-23, 28, 29, 33, 42, 43, 50-52, 63-65, 70, 71, and 75, stating that these claims contain allowable subject matter, and would be allowable if rewritten in independent form to include all of the limitations of the respective base claims and any intervening claims. Accordingly, Claims 1, 28, 33, 40, 45, 70, and 75 have been amended as follows.

Base Claim 1 has been amended to include the allowable subject matter of Claims 8 and 21, and the limitations of intervening Claims 5 and 18. Applicants therefore submit that Claim 1 and the claims dependent thereon are now allowable.

Application No. 09/683,659  
Amendment dated December 9, 2004  
Reply to Office Action of September 17, 2004

RD-26,623-1

Claim 28 has been rewritten in independent form to included the limitations of base Claim 1 and intervening Claim 25. New Claims 95-104, which depend upon Claim 28 and contain the subject matter originally recited in Claims 2-4, 11-13, 30, 31, 35, and 36, have also been added. Applicants therefore submit that Claim 28, and the claims dependent thereon, are now in condition for allowance.

Claim 33 has been rewritten in independent form to included the limitations of base Claim 1 and intervening Claim 32. New Claims 105-114, which depend upon Claim 28 and contain the subject matter originally recited in Claims 2-4, 11-13, 30, 31, 35, and 36, have also been added. Applicants therefore submit that Claim 33, and the claims dependent thereon, are now in condition for allowance.

Base Claim 40 has been amended to include the allowable subject matter of Claim 42. Applicants therefore submit that Claim 40 and the claims dependent thereon are now allowable.

Base Claim 45 has been amended to include the allowable subject matter of Claims 50 and 63, and the limitations of intervening Claims 47 and 60. Applicants therefore submit that Claim 45 and the claims dependent thereon are now allowable.

Claim 70 has been rewritten in independent form to included the limitations of base Claim 45 and intervening Claim 67. New Claims 115-121, which depend upon Claim 70 and contain the subject matter originally recited in Claims 46, 53-55, 72, 73, and 77, have also been added. Applicants therefore submit that Claim 70, and the claims dependent thereon, are now in condition for allowance.

Claim 75 has been rewritten in independent form to included the limitations of base Claim 45 and intervening Claim 74. New Claims 122-128, which depend upon Claim 75 and contain the subject matter originally recited in Claims 46, 53-55, 72, 73, and 77, have also been added. Applicants therefore submit that Claim 75, and the claims dependent thereon, are now in condition for allowance.

Application No. 09/683,659  
Amendment dated December 9, 2004  
Reply to Office Action of September 17, 2004

RD-26,623-1

Claims 9, 10, 19, 20, 26, 27, 34, 48, 49, 51, 52, 61, 62, 68, 69, and 76 have each been amended to maintain proper dependency.

Rejection under 35 U.S.C. §102(a) and §103(a)

Claims 1-6, 18, 20, 25-26, 30-32, 34, 37-41, 44-48, 60, 62, 67-68, 72-74, 76, and 78-80 have been rejected under 35 U.S.C. §102(a) as being anticipated by Byrappa et al., Handbook of Hydrothermal Technology, Chapter 3: Apparatus, pp. 82-160, 2001 (referred to hereinafter as "Byrappa"). Claims 7, 19, 24, 27, 35-36, 49, 61, 66, 69, and 77 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Byrappa. Claims 11-17 and 55-59 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Byrappa in view of Purdy (U.S. Patent 5,902,396).

Applicants submit that, as previously presented, Claims 1, 28, 33, 40, 45, 70, and 75 have each been amended to overcome the Examiner's objections and are now in condition for allowance. Applicants therefore submit that the rejections of these claims and the claims dependent thereon under 35 U.S.C. §103(a) are therefore moot.

In light of the amendment and remarks presented herein, Applicants submit that the case is in condition for immediate allowance and respectfully requests such action. If, however, any issues remain unresolved, the Examiner is invited to telephone the Applicants' counsel at the number provided below.

Respectfully submitted,



Robert P. Santandrea  
Counsel for Applicants  
Registration No. 45,072  
Telephone: (518) 387-6304 or  
(518) 387-7122

Schenectady, New York  
December 9, 2004